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NOTICE OF ALLOWANCE AND FEE(S) DUE

22204 7590 10/22/2004

NIXON PEABODY, LLP
401 9TH STREET, NW
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WASHINGTON, DC 20004-2128

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EXAMINER

ABDI, KAMBIZ

ART UNIT PAPER NUMBER

3621

DATE MAILED: 10/22/2004

APPLICATION NO.	FILING DATE	INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,950	12/17/2001	Mark J. Stefik	111325-87	3970

TITLE OF INVENTION: COMPOSITE DIGITAL WORKS HAVING USAGE RIGHTS AND METHOD FOR CREATING THE SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1370	\$300	\$1670	01/24/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail**

**Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
(703) 746-4000**

or **Fax**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

22204 7590 10/22/2004

**NIXON PEABODY, LLP
401 9TH STREET, NW
SUITE 900
WASHINGTON, DC 20004-2128**

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (703) 746-4000, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

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APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1370	\$300	\$1670	01/24/2005

EXAMINER	ART UNIT	CLASS-SUBCLASS
ABDI, KAMBIZ	3621	705-001000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1	_____
2	_____
3	_____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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DATE MAILED: 10/22/2004

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 307 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 307 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



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22204	7590	10/22/2004	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			ABDI. KAMBIZ	
			ART UNIT	PAPER NUMBER
			3621	
DATE MAILED: 10/22/2004				

Notice of Fee Increase on October 1, 2004

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2004, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" because some fees will increase effective October 1, 2004. See Revision of Patent Fees for Fiscal Year 2005; Final Rule, 69 Fed. Reg. 52604, 52606 (May 10, 2004).

The current fee schedule is accessible from WEB site (<http://www.uspto.gov/main/howtofees.htm>).

If the fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due" but not the correct amount in view of the fee increase, a "Notice of Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice of Pay Balance of Issue Fee," if the response to the Notice of Allowance is to be filed on or after October 1, 2004 (or mailed with a certificate of mailing on or after October 1, 2004), the issue fee paid should be the fee that is required at the time the fee is paid. See Manual of Patent Examining Procedure (MPEP), Section 1306 (Eighth Edition, Rev. 2, May 2004). If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously-paid issue fee should be paid. See MPEP Section 1308.01.

Effective October 1, 2004, 37 CFR 1.18 is amended by revising paragraphs (a) through (c) to read as set forth below.

Section 1.18 Patent post allowance (including issue) fees.

- (a) Issue fee for issuing each original or reissue patent, except a design or plant patent:
- | | |
|---------------------------------------|------------|
| By a small entity (Sec. 1.27(a))..... | \$685.00 |
| By other than a small entity..... | \$1,370.00 |
- (b) Issue fee for issuing a design patent:
- | | |
|---------------------------------------|----------|
| By a small entity (Sec. 1.27(a))..... | \$245.00 |
| By other than a small entity..... | \$490.00 |
- (c) Issue fee for issuing a plant patent:
- | | |
|---------------------------------------|----------|
| By a small entity (Sec. 1.27(a))..... | \$330.00 |
| By other than a small entity..... | \$660.00 |

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

Art Unit: 3621

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this section can be found in the prior office action. Prior office action dated 15 October 2002 is incorporated in this office action by reference.

- Claims 2-3, 5-7, 9, 11, 13-14, 16-17, 19-20, and 22 are canceled.
- Claims 1, 4, 8, 10, 12, 15, 18, 21 and 23 have been allowed.

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in an interview with attorney Carlos R. Villamar on 31 August 2004.

The examiner under agreement by the attorney representing the applicant has amended claims 1, 12, and 18.

The claims in the application has been amended as follow:

1. (Currently amended) A method for creating a composite digital work having usage rights, said method comprising:

a) electronically creating a digital content portion of a composite digital work including a plurality of content parts; and

b) electronically creating a description structure for said composite digital work, said description structure comprising a plurality of description blocks including usage rights associated with at least a corresponding at least one of said content parts, said usage rights specifying a manner of use for the corresponding one of said content parts, said manner of use indicating one or more stated purposes for which the corresponding digital content portion can be at least one of used and distributed by an authorized user;

c) interpreting said usage rights with a device including a repository to determine if access to the digital content can be granted; and

d) storing said composite digital work in a repository,

wherein said step (a) comprises the steps of:

a1) electronically creating a first content part of said composite digital work;

a2) electronically creating a second content part of said composite digital work; and

Art Unit: 3621

a3) combining said first content part and said second content part to form said content portion, said step (b) comprises:

b1) electronically creating a first description block including a first set of usage rights associated with said first content part;

b2) electronically creating a second description block including a second set of usage rights associated with said second content part; and

b3) electronically creating a third description block including a third set of usage rights associated with the combination of said first content part and said second content part,

said step (b) comprises linking said first description block, said second description block and said third description block in a manner corresponding to the organization of said composite digital work,

said step (d) comprises the steps of storing said description structure in a first storage device and storing said digital content portion in a second storage device,

said step of creating the third description block comprises specifying the third set of usage rights and storing the third set of usage rights in a control information part of said third description block, and

said third set of usage rights include a usage right indicating that no subsequent description blocks for specifying usage rights may be added to the description structure.

2-3. (Cancelled)

4. (Currently Amended) The method as recited in claim 1, wherein said steps (a2) and (b2) comprise obtaining an existing digital work having a description block associated therewith as said second content part and said second description block.

5-7. (Cancelled)

8. (Currently amended) The method as recited in claim 1, wherein each of said first description block, said second description block and said third description block comprise a pointer to a corresponding content part stored in said second storage device and a control information part storing usage rights for said corresponding part of said content portion and wherein said step of creating a first description block comprises specifying the first set of usage rights and storing the first set of usage rights in said control information part of said first description block.

9. (Cancelled)

10. (Currently amended) The method as recited in claim 1, wherein said step of creating said second content part comprises extracting said second content part from an existing digital work.

Art Unit: 3621

11. (Cancelled)

12. (Currently amended) A method for assigning usage rights to a composite digital having a digital content portion that includes a plurality of content parts that each correspond to an individual digital work, said method comprising:

a) electronically creating a description structure for said composite digital work, said description structure comprising a plurality of description blocks that each correspond to a content part of the composite digital work;

b) storing usage rights associated with a corresponding at least one of said content parts in the description blocks, said usage rights specifying a manner of use for the corresponding one of said content parts, said manner of use indicating one or more stated purposes for which the corresponding digital content portion can be at least one of used and distributed by an authorized user; and

c) interpreting said usage rights with a device including a repository to determine if access to the digital content can be granted,

wherein the composite digital work includes a first content part and a second content part and wherein said step (a) comprises the steps of:

a1) electronically creating a first description block including a first set of usage rights associated with said first content part of said composite digital work;

a2) electronically creating a second description block including a second set of usage rights associated with said second content part of said composite digital work; and

a3) electronically creating a third description block including a third set of usage rights associated with a combination of said first content part and said second content part,

said first description block, said second description block and said third description block are linked in a manner corresponding to the organization of the composite digital work,

said step of creating a third description block comprises specifying the third set of usage rights and storing the third set of usage rights in a control information part of said third description block,

said third set of usage rights include a usage right indicating that no subsequent description blocks for specifying usage rights may be added to the description structure,

said composite digital work is stored in a repository,

said description structure is stored in a first storage device, and

said digital content portion is stored in a second storage device.

13-14. (Cancelled)

Art Unit: 3621

15. (Currently amended) The method as recited in claim 12, wherein each of said first description block, said second description block and said third description block is comprised of a pointer to a corresponding one of said content parts and comprise a control information part storing usage rights for said corresponding part of said content portion and wherein said step of creating a first description block for said first content part is further comprised of the step of specifying a the first set of usage rights and storing the first set of usage rights in said control information part of said first description block.

16-17. (Cancelled)

18. (Currently amended) A system for controlling use of a composite digital work having usage rights, said system comprising:

a digital content portion including a plurality of content parts configured to be interpreted by a rendering device; and

a description structure for said composite digital work, said description structure comprising a plurality of description blocks including usage rights associated with at least a corresponding at least one of said content parts, said usage rights specifying a manner of use for the corresponding one of said content parts, said manner of use indicating one or more stated purposes for which the corresponding digital content portion can be at least one of used and distributed by an authorized user;

a device including a repository for interpreting said usage rights to determine if access to the digital content can be granted,

wherein the said digital content portion comprises a first content part of said composite digital work and a second content part of said composite digital work,

said description structure comprises a first description block including a first set of usage rights associated with said first content part, a second description block including a second set of usage rights associated with said second content part, and a third description block including a third set of usage rights associated with said first content part and said second content part in combination,

said first description block, said second description block and said third description block are linked in a manner corresponding to the organization of said composite digital work,

said third description block comprises the third set of usage rights stored in a control information part of said third description block,

said third set of usage rights include a usage right indicating that no subsequent description blocks for specifying usage rights may be added to the description structure,

said composite digital work is stored in a repository,

said description structure is stored in a first storage device, and

said digital content portion is stored in a second storage device.

19-20. (Cancelled)

Art Unit: 3621

21. (Currently amended) The system as recited in claim 18, wherein said second content part comprises an existing digital work having a description block associated therewith.

22. (Cancelled)

23. (Currently amended) The system as recited in claim 18, wherein each of said first description block, said second description block and said third description block comprise a pointer to a corresponding content part and a control information part storing usage rights for said corresponding part of said content portion.

Allowable Subject Matter

1. Claims 1-23 are allowed over the prior art of record.
2. The following is an examiner's statement of reason for allowance:

The closest prior art of record is U.S. Patent No. 5,260,999 to Robert M. Wyman. Wyman provides a method and system to control usage policy of a digital product based on licensed terms, conditions, and authorization. Wyman is directed towards distribution of digital products and licensing the same either in full or in part. Wyman also discloses how a rights management system and method can add terms and condition to a licensed digital software, content, or data. But clearly Wyman points to a method that usage rights are based on a go or no go type of licensing. On the other hand, applicants claimed invention is directed towards creating a composite digital works that have attached usage rights.

The usage right is not based on solely on a Boolean operation of Wyman but also depends on;

"b1) electronically creating a first description block including a first set of usage rights associated with said first content part;

b2) electronically creating a second description block including a second set of usage rights associated with said second content part; and

b3) electronically creating a third description block including a third set of usage rights associated with the combination of said first content part and said second content part,

said step (b) comprises linking said first description block, said second description block and said third description block in a manner corresponding to the organization of said composite digital work,

said step (d) comprises the steps of storing said description structure in a first storage device and storing said digital content portion in a second storage device,

Art Unit: 3621

said step of creating the third description block comprises specifying the third set of usage rights and storing the third set of usage rights in a control information part of said third description block, and said third set of usage rights include a usage right indicating that no subsequent description blocks for specifying usage rights may be added to the description structure" as been claimed.

The closest foreign prior art of record is European Patent No. GB-2236604 A to John R Corbin, and the NPL cited by the applicant titled "Digital Rights Management Technology" by Weber, R. published in October 1995, which they relate to the general state of the art.

In regards to claims 1, 12 and 18, the closest prior art of record when taken either individually or in combination with other prior art of record fails to teach or suggest the step of "said usage rights specifying a manner of use for the corresponding one of said content parts, said manner of use indicating one or more stated purposes for which the corresponding digital content portion can be at least one of used and distributed by an authorized user". Digital use is clearly based on the attributes used based on the "a description structure for said composite digital work, said description structure comprising a plurality of description blocks including usage rights associated with at least a corresponding at least one of said content parts".

Claims 2-11, 13-17, and 19-23 are dependent upon claims 1, 12, and 18, thus they have all the limitations of claim 1, 12, and 18, therefore, they are allowable for that same reason.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kambiz Abdi whose telephone number is (703) 305-3364. The examiner can normally be reached on 9 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P Trammell can be reached on (703) 305-9768. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Art Unit: 3621

Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

**Commissioner of Patents and Trademarks
Washington, D.C. 20231**

or faxed to:

(703) 872-9306 [Official communications; including After Final communications labeled "Box AF"]

(703) 746-7749 [Informal/Draft communications, labeled "PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to:

**Crystal Park 5, 2451 Crystal Drive
7th floor receptionist, Arlington, VA, 22202**

Kambiz Abdi
Examiner
October 13, 2004

Interview Summary	Application No.	Applicant(s)	
	10/015,950	STEFIK ET AL.	
	Examiner	Art Unit	
	Kambiz Abdi	3621	

All participants (applicant, applicant's representative, PTO personnel):

- (1) Kambiz Abdi. (3) John Hayes.
 (2) Bijan Tadayon. (4) Carlos Villamar.

Date of Interview: 31 August 2004.

Type: a) ☐ Telephonic b) ☐ Video Conference
 c) ☒ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.
 If Yes, brief description: NA.

Claim(s) discussed: Independent claim1.

Identification of prior art discussed: Fabbio, 5,335,346; Hinsley 5,295,266; and Kishi H03-282733.


Agreement with respect to the claims f) ☒ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.


 Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Independent claim 1 of application 10-015950 was discussed and how this claim would be viewed in view of the newly introduced references. As well as, how the new references would be interpreted in view of the currently submitted claims. Also it was discussed that Satio reference is not applicable to the current application as its date is not good based on priority claimed by the applicant. New references were discussed in detail and how they could be applied to the current claims as they have been presented in the application. A few proposals for amending the claims were put forward based on the discussion of the new references, by the applicant. It was agreed by the applicant that, once the amendments have been submitted in writing and officially entered into the records, examiner would consider such amendments. No agreements were reached regarding the allowability of any of the claims as they have been presented in their current forms in the application mentioned above.

Notice of References Cited	Application/Control No. 10/015,950	Applicant(s)/Patent Under Reexamination STEFIK ET AL.	
	Examiner Kambiz Abdi	Art Unit 3621	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,335,346	08-1994	Fabbio, Robert A.	711/163
	B	US-5,295,266	03-1994	Hinsley et al.	718/101
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	JP H03-282733	12-1991	Japan	Mihoko Kishi et al.	G06-F 9/06
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of Allowability

Application No.

10/015,950

Examiner

Kambiz Abdi

Applicant(s)

STEFIK ET AL.

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11 June 2003.
2. ☒ The allowed claim(s) is/are 1,4,8,10,12,15,18,21 and 23.
3. ☒ The drawings filed on 17 December 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

PTO 04-3950

Japanese Patent

Document No. H03-282733

RULE GENERATION DEVICE FOR UTILIZING A SOFTWARE COMPONENT

[Sofutowea Buhin Riyo Ruru Seisei Sochi]

Mihoko Kishi and Koichi Kachi

UNITED STATES PATENT AND TRADEMARK OFFICE

Washington, D.C.

June 2004

Translated by: Schreiber Translations, Inc.

<u>Country</u>	:	Japan
<u>Document No.</u>	:	H03-282733
<u>Document Type</u>	:	Kokai
<u>Language</u>	:	Japanese
<u>Inventor</u>	:	Mihoko Kishi and Koichi Kachi
<u>Applicant</u>	:	Toshiba Corp.
<u>IPC</u>	:	G 06 F 9/06
<u>Application Date</u>	:	December 12, 1991
<u>Publication Date</u>	:	March 30, 1990
<u>Foreign Language Title</u>	:	Sofutowea Buhin Riyo Ruru Seisei Sochi
<u>English Title</u>	:	RULE GENERATION DEVICE FOR UTILIZING A SOFTWARE COMPONENT

Specification

1. Title of the invention

Rule generation device for utilizing a software component.

2. Patent Claim

A rule generation device for utilizing a software component characterized by the possession of

A component packaging mechanism designed to collect & package software components provided, in relation to the respective targets handled in a given field, for operating said targets,

An inter-component utility restriction scripting mechanism designed to script restrictions on the joint utilities of multiple software components within each component package generated by said component packaging mechanism,

An inter-package relationship definition mechanism designed to define the relationships among the respective component packages generated by the aforementioned component packaging mechanism, and

An inter-component utility restriction fusion mechanism designed to extract, from the script texts of the restrictions on the joint utilities of multiple software components within each component package scripted by the aforementioned inter-component utility restriction scripting mechanism, script portions on the software components actually utilized for program formulation and

¹ Numbers in the margin indicate pagination in the foreign text.

to generate, by fusing these script portions based on the relationships among the respective component packages defined by the aforementioned inter-package relationship definition mechanism, a restriction script text on the joint utilities of multiple software components actually utilized for the aforementioned program formulation.

3. Detailed explanation of the invention

(Objective of the invention)

(Industrial application fields)

The present invention concerns a rule generation device for assisting in utilizing a software component, which is used for verifying a program formulated by coupling software components. specifications concerning

(Prior art)

A program formulated in the prior art by coupling software components is verified based on any of the following methods:

<1>: After a program has been formulated by synthesizing software components, it is verified in compliance with test specifications according to procedures comparable to those for verifying a program formulated by an ordinary method without recourse to component synthesis;

<2>: After a program has been formulated by synthesizing components, whether or not restrictive conditions on component utility are being satisfied is checked; ... /2...

<3>: Restrictive conditions among the respective components are preliminarily defined, and whether or not such restrictive conditions are being satisfied by a given component is checked on an occasion for utilizing said component.

The respective methods listed above, however, are plagued with the following problems.

Despite the fact that a program has been formulated by means of component synthesis according to the method of <1>, the advantage of this history cannot be inherited by the test. In other words, despite the guaranteed reliability of each component, despite it is necessary to formulate, in a redundant manner, necessary to specifications comparable to those of a program formulated without recourse to component synthesis.

The method of <2> is a test method that exploits the advantage of the component synthesis, for only the combination of components with guaranteed qualities needs to be checked, although it is difficult to automate the test in that it is cumbersome to formally script the entire relationships among large numbers of components.

The method of <3> is advantageous in the sense that a program with a high reliability can be formulated since the component synthesis is perpetually checked, although it is difficult to automate the test, as in the method of <2>.

(Problems to be solved by the invention)

Thus, it has been difficult to automate operations of the prior art for verifying programs formulated by means of component synthesis due to the cumbersomeness of formally scripting restrictions on the utilities among the entire components.

The objective of the present invention, which has been conceived for solving these problems, is to provide a rule generation device for utilizing a software component capable of automating program verifying operations.

(Constitution of the invention)

(Mechanism for solving the problems)

(Functions)

The rule generation device of the present invention for utilizing a software component possesses, for the purpose of achieving the aforementioned objective, a component packaging mechanism designed to collect & package software components provided, in relation to the respective targets handled in a given field, for operating said targets, an inter-component utility restriction scripting mechanism designed to script restrictions on the joint utilities of multiple software components within each component package generated by said component packaging mechanism, an inter-package relationship definition mechanism designed to define the relationships among the respective component packages generated by the aforementioned component packaging mechanism, and

an inter-component utility restriction fusion mechanism designed to extract, from the script texts of the restrictions on the joint utilities of multiple software components within each component package scripted by the aforementioned inter-component utility restriction scripting mechanism, script portions on the software components actually utilized for program formulation and to generate, by fusing these script portions based on the relationships among the respective component packages defined by the aforementioned inter-package relationship definition mechanism, a restriction script text on the joint utilities of multiple software components actually utilized for the aforementioned program formulation.

(Functions)

(Functions)

As far as the rule generation device of the present invention is concerned, for utilizing a software component is concerned, software components for operating targets handled in a given field are collected & packaged by the component packaging mechanism in accordance with relation to the respective targets, whereas the relationships among the respective component packages are defined by the inter-package relationship definition mechanism, whereas restrictions on the joint utilities of multiple software components within each component package are scripted by the inter-component utility restriction scripting mechanism. The inter-component utility restriction fusion mechanism, furthermore, extracts, from the script texts of the restrictions on the joint utilities of

multiple software components within each component package scripted by the inter-component utility restriction scripting mechanism, script portions on the software components actually utilized for program formulation and generates, by fusing these script portions based on the relationships among the respective component packages defined by the inter-package relationship definition mechanism, a restriction script text on the joint utilities of multiple software components actually utilized for the aforementioned program formulation.

According to the present invention, therefore, it becomes possible to automatically formulate, by using a formal language, the restriction script texts on the joint utilities of multiple software components utilized for the aforementioned program formulation and, as a result, to automate the program verifying operation.

(Application examples)

In the following, an application example of the present invention will be explained with reference to figures.

Figure 1 is a block diagram provided for explaining the constitution of an application example of the rule generation device of the present invention for utilizing a software component.

In the same figure, (1) is a component packaging unit which collects & packages software components (hereafter referred to simply as "components") used for operating data that define

targets handled in a given field (i.e., application program) in relation to the respective targets.

(2) is an inter-component utility restriction scripting unit which scripts, by using a formal language, restrictions on the joint utilities of multiple components within each component package generated by the component packaging unit (1).

(3) is an inter-package relationship definition unit which defines the relationships among the respective component packages generated by the component packaging unit (1) [e.g., parent-offspring (is-a) relationship, etc.]. It should be noted that the relationships among targets hereby serve as the relationships among targets as they are.

(4) is an inter-component utility restriction fusion unit which extracts, from the script texts of the restrictions on the joint utilities of multiple software components within each component package scripted by the inter-component utility restriction scripting unit (2), script portions on the software components actually utilized for program formulation and generates, by fusing these script portions based on the relationships among the respective component packages defined by the inter-package relationship definition unit (3), a restriction script text on the joint utilities of multiple software components actually utilized for the aforementioned program formulation.

Next, the actions of the rule generation device for utilizing a software component characterized by the foregoing constitution

will be explained with reference mainly to Figure 2 as well as to Figures 3 through 7.

First, the component packaging unit (1) extracts targets handled in a given field, whereas the relationships among the respective component packages are defined by the inter-package relationship definition unit (3) (step a). Figure 3 shows examples of such relationships among the respective packages (relationships of targets handled by a window system).

Subsequently, the component packaging unit (1) formulates a component package by collecting components for operating each target (step b). Figure 4 shows a component package for operating an "I/O sub-window," which represents one of such targets.

Next, the inter-component utility restriction scripting unit (2) scripts, by using a formal language, restrictions on the joint of the utilities of multiple components within each package (step c) and then stores them within a database (step d).

The corresponding example is shown in Figures 5 and 6.

Figure 5 shows a restriction script text on the joint of the utilities of multiple components within the "main window" package. The following are expressed by this text:

"In order to utilize a component within this package, it is necessary to use 'window-create,' namely a component for securing a main window, in the first place";

"In a case where a component within this package is used, it is necessary to use 'window-destroy,' namely a component for releasing the main window region, at the end."

Figure 6, furthermore, shows a restriction script text on the joint utilities of multiple components within the "I/O sub-window" package.

The following are expressed by this text:

"In order to utilize a component within this package, it is necessary to use 'io-open,' namely a component for opening the I/O sub-window, in the first place";

"In a case where a component within this package is used, it is necessary to use 'io-close,' namely a component for closing the I/O sub-window, at the end."

Subsequently, the inter-component utility restriction fusion unit (4) proceeds, upon the reception of a list of utilized components from the program formulator, to extract, from the script texts of the restrictions on the joint utilities of the multiple software components within each component package, described by the inter-component utility restriction scripting unit (2), script portions on the utilized components mentioned in the list (step e), to judge the relationships among the component packages inclusive of said utilized components (step f), to fuse the extracted restriction script texts based on the ascertained relationships among the component packages (step g), and to formulate a restriction script text on the joint uses of the utilized components (component utility rules) (step g).

Figure 7 shows an example of restriction script text formulated by this inter-component utility restriction fusion unit (4) (component utility rules).

The following is expressed by this text:

"The components must be used in the prescribed order, although another component(s) may intervene in-between." /4

Thus, the rule generation device of this application example for utilizing a software component is capable of automatically formulating restriction script texts on multiple components utilized jointly for the formulation of a program, and in a case where such texts are used as test specifications, it becomes possible to automate the program verifying operation:

In a case where the present device is integrated with a component synthesizing system, furthermore, the component synthesis can be executed in a concomitantly verified state, and it becomes possible to formulate a program with a high reliability component in a highly efficient manner.

(Effects of the invention)

As the foregoing explanations have demonstrated, the rule script generation device of the present invention for utilizing a software component is capable of automatically formulating, by using a formal language, restriction script texts on the joint utilities of multiple software components utilized for the aforementioned program formulation, as a result of which it becomes possible to automate the program verifying operation.

4. Brief explanation of the figures

Figure 1 is a block diagram provided for explaining the constitution of an application example of the rule generation device of the present invention for utilizing a software component. Figure 2 is a flow chart provided for explaining the actions of the rule generation device for utilizing a software component shown in Figure 1, whereas Figure 3 is a diagram which shows the relationships among the respective packages, whereas Figure 4 is a diagram which shows an example of package, whereas Figures 5 and 6 are each diagrams which show examples of restriction script texts on joint utilities of multiple components within a package, whereas Figure 7 is a diagram which shows an example of component utility rules generated by the rule generation device for utilizing a software component shown in Figure 1.

Figure 1.

(1): Component packaging unit; (2): Inter-component utility restriction scripting unit; (3): Inter-package relationship definition unit; (4): Inter-component utility restriction fusion unit.

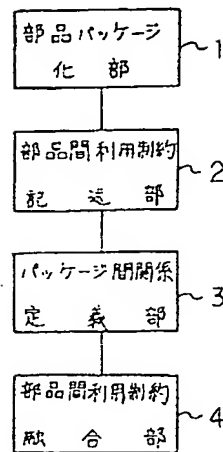
Applicant: Toshiba Corp.

Agent: Saichi Suyama, patent attorney

Applicant: Toshiba

Agent: Saichi Suyama

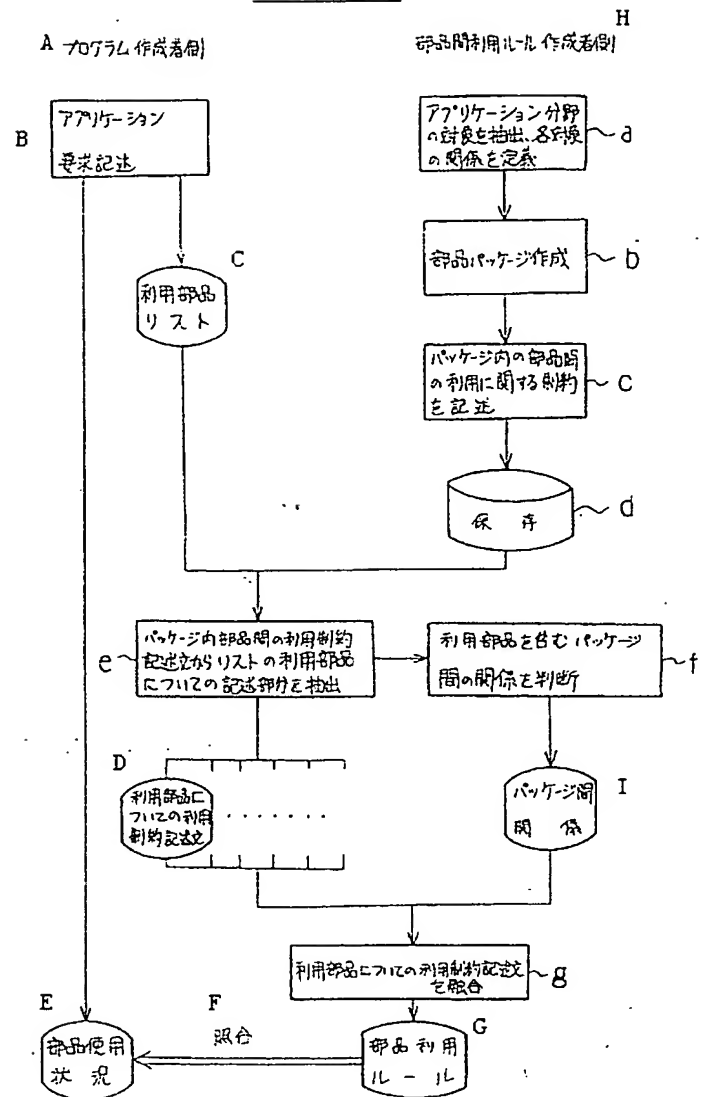
Figure 1



[(1): Component packaging unit; (2): Inter-component utility restriction scripting unit; (3): Inter-package relationship definition unit; (4): Inter-component utility restriction fusion unit]

Figure 2

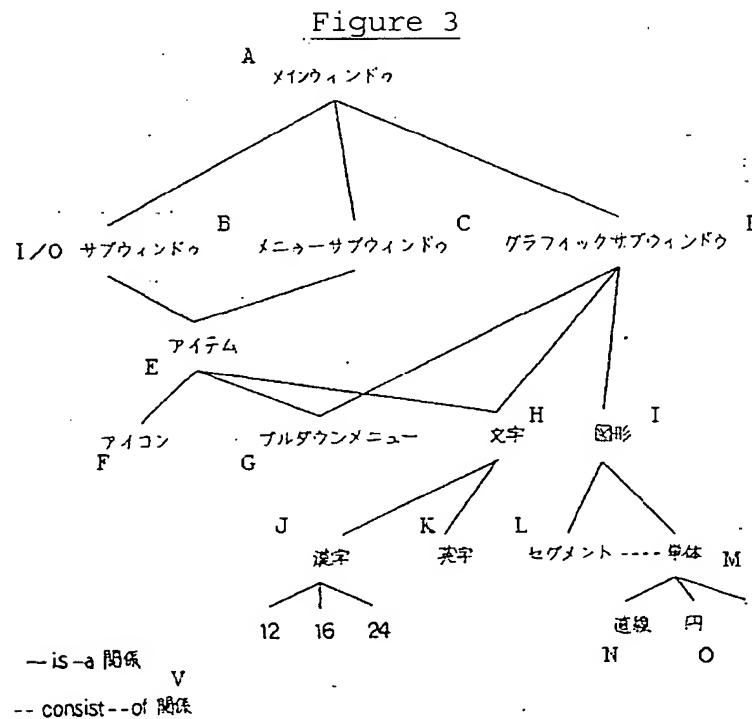
/5



第 2 図

[(A): Program formulator side; (B): Application request script; (C): Utilized component list; (D): Utility restriction script text on utilized components; (E): Component utility state; (F): Matching; (G): Component utility rule; (a): Extraction of targets within an application field & definition of relationships among

the respective targets; (b): Component package formulation; (c): Script on restrictions on joint utilities of multiple components within a package; (d): Storage; (e): Extraction, from the script texts of the restrictions on the joint utilities of multiple software components within each component package, script portions on the utilized components mentioned in the list; (f): Judgment of relationships among packages inclusive of utilized components; (g): Fusion of utility restriction script texts on the utilized components]



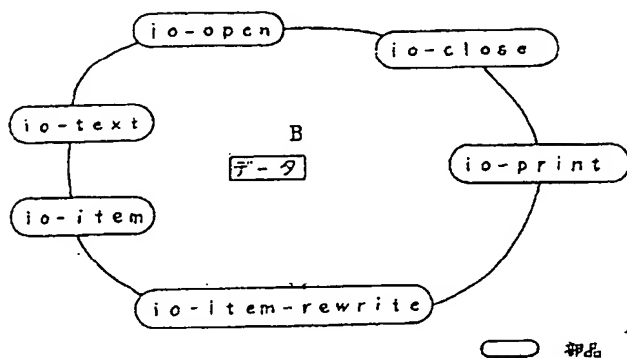
第 3 図

[(A): Main window; (B): I/O sub-window; (C): Menu sub-window; (D): Graphic sub-window; (E): Item; (F): Icon; (G): Pull-down menu;

(H): Characters; (I): Patterns; (J): Kanji characters; (K): European characters; (L): Segment; (M): Singular entity; (N): Line; (O): Circle; (V): Relationship]

Figure 4

/4



第 4 図

[(A): Component; (B): Data]

[(A): Component; (B): Data]

Figure 5

INIT: window-create
END: window-destroy

第 5 図

Figure 6

INIT: io-open
END: io-close

第 6 図

Figure 7

order:window_create,io_open,io_close,window_destroy

第 7 圖

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